



Resiliency Hub AOI Funding Opportunity Announcement (FOA) FY2023 Resilient Maryland Program

*****THIS FOA IS FOR AREA OF INTEREST 3: RESILIENCY HUB GRANT PROGRAM UNDER THE FY23 RESILIENT MARYLAND PROGRAM.*****

Area of Interest (AOI) Description: The Maryland Energy Administration (MEA) is pleased to announce funding under AOI 3: Resiliency Hub Grant Program (“AOI 3”, “this AOI”) to provide grant funds for the construction of Resiliency Hubs in Maryland communities that help increase community resilience to power outages and other emergency events affecting the availability of energy to residents. Grants offered under this AOI are to help cover the capital expenses for Resiliency Hub projects that are “shovel ready”, i.e., have already been evaluated for feasibility and have been conceptualized. This competitive AOI will help offset the costs of equipment and installation of the distributed energy resources (DERs) and the associated wiring and communication infrastructure comprising the Resiliency Hub.

AOI 3 provides funds to incentivize the development of Resiliency Hubs that enhance the resilience of residential neighborhoods and their residents. To be considered for an award, a project must include at least a solar system as its primary fuel, and an energy storage system that function together to both provide sufficient energy and power to required electrical loads for the required period of time. To be considered, a proposed Resiliency Hub **must** be able to demonstrate substantial pre-construction due diligence. For this reason, an **ideal project will be a proposed Resiliency Hub that successfully completed feasibility and planning Final Deliverables under previous rounds of MEA’s Resilient Maryland planning grant program or can demonstrate equivalence.**

AOI Purpose: This program provides funding for the final development and construction of solar plus energy storage systems to serve as “Resiliency Hubs.” During periods of grid outage, the solar plus energy storage system (with or without emergency generator), will provide a no-cost resiliency center for the surrounding community. At a minimum, a Resiliency Hub provides

emergency heating and cooling; refrigeration of temperature sensitive medications; plug power for charging of cell phone and computer batteries; ventilation and emergency lighting. While a fossil fuel emergency generator may be included in the final system design, grant funding may not be used for the purchase, installation, or integration of a fossil fuel generator system. A Resiliency Hub that will be installed on an existing building, as well as a Resiliency Hub that will be installed at a new building, are eligible for funding consideration.

Anticipated Funding: A total of \$500,000 is expected to be available, from the Strategic Energy Investment Fund (SEIF). The amount awarded may be more or less, depending on the quantity and quality of applications received. **Individual Awards are not expected to exceed \$500,000 per project.**

Type of Grant Program: Competitive

Application Deadline: 5:00 P.M. EST, Thursday, January 26, 2023

Eligible Applicants: Maryland businesses, non-profits, state agencies, local governments, public universities, community colleges, and public schools within the State of Maryland. Eligible organizations must be registered to do business in, or have authority to operate within, the State of Maryland.

Individual Maryland residents are not eligible for Resilient Maryland grants, however qualifying sole proprietorship agricultural operations are eligible to apply. To be considered “qualifying,” the sole proprietorship must be up-to-date filling its IRS Form Schedule F, and filing its Nutrient Management Plan with the Maryland Department of Agriculture. MEA may ask for copies of one or both of these documents for eligibility verification.

A project may be owned by the project site owner, or the project may be owned by a third party that installs and operates the project at the project site and provides the benefit of the project to the project site owner (e.g., under a power purchase agreement, lease, etc.). In any case, both the site owner and the system owner must be an applicant (i.e., sign the application) and, if awarded, a grantee (i.e., sign the grant agreement). Funding under an award will be provided directly to the applicant that has requested to receive the funds on the application form, with the exception of state agencies and units of local government, in which case funds will be awarded directly to the state agency or local government.

Eligible Activities: Detailed design, installation, and operation of a Resiliency Hub (defined below) for a period of at least 5 years.

An Applicant must have completed a substantial amount of preconstruction activities to assure the proposed project's feasibility and constructability. To evidence that this due diligence has been completed for the proposed project, the application must include the budget, timeline, and design demonstrating readiness to work. If a proposed project is not eligible for AOI 3 because of insufficient preconstruction activities, it may be a good candidate for AOI 1: Feasibility and Planning of the FY23 Resilient Maryland Program.

Eligible Costs: Grant funds will be used to help offset some of the costs of the solar energy generating system, the energy storage system, new switchboards, meters, microgrid and battery control equipment, as well as costs of rewiring the building to accommodate the Resiliency Hub system.

Award Amount: Grants will be based on the capacity of solar (kW) energy needed to provide the required Resiliency Hub loads for the required period of time. Funding will be provided at a rate of \$3,000/kW for NEW solar installed in support of the Resiliency Hub. Additional solar and/or battery storage capacity may be added to the minimum capacity needed to power the required Resiliency Hub loads, but the amount of grant funds awarded will only help offset the cost of the capacity needed for the required Resiliency Hub loads. MEA will not provide funds for any existing solar capacity that has been previously installed at the project site.

Evaluation Criteria: All projects must meet the Minimum Eligibility Criteria listed at the end of this FOA to be considered for an award. Upon meeting these criteria, each eligible project will be evaluated using the Evaluation Criteria **that are listed in Annex 1: FY23 Resilient Maryland Resiliency Hub Application Checklist, provided at the end of this FOA.** The highest-scoring applications will be awarded, subject to the program's funding availability.

Priority funding consideration will be given to a project that supports low and moderate income neighborhoods, which may include a project that will use a community solar energy generating system that provides more than 30% of the system output to subscribers that experience low-to-moderate income, over an eligible project that does not.

The primary Evaluation Criterion is the Site Justification, which is explained in Annex 1 to this FOA.

Additional points may be awarded for a project that accomplishes one or more of the following:

- Guaranties more than 14 hours of operation per day (1 point for 15-23 hours, 2 points for 24 hour-per-day operation);
- Provides new power where there was no backup power before (1 point for yes);
- Is expected to be completed in less than 18 months? (1 point for yes);
- Provides a reasonable plan for the operation of the Resiliency Hub (1 point for yes); and
- Focuses on a property in a community that has experienced low-income that is within walking distance (normally assumed to be ½ mile) (1 point for yes).

Due to the complexity of the selection process, MEA may request additional information from an applicant after all applications have been submitted to facilitate the evaluation process.

Geographic Diversity: MEA, at its sole discretion may place funding priority on a project that helps to obtain a reasonable geographic diversity of projects.

Review Process: Each application package will be evaluated competitively by an Evaluation Team. Please see the Review Process section of the FY23 Resilient Maryland FY23 RESILIENT MARYLAND OVERVIEW DOCUMENT for more information on the Evaluation Team. The Evaluation will consist of three (3) steps:

Step 1: The MEA Program Manager reviews each application for eligibility according to the Minimum Eligibility Criteria section of this FOA. An application that does not meet the AOI's Minimum Eligibility Criteria may be rejected from funding consideration.

Step 2: The MEA Program Manager will assemble an Evaluation Team of at least 3 qualified MEA Program Managers, Energy Specialists, or other MEA employees deemed appropriate by the MEA Program Manager. Individuals from outside MEA may be included at the Program Manager's discretion. All team members will review each application using the FY23 Resilient Maryland Resiliency Hub Application Review Checklist, provided in Annex 1. Projects are ranked from highest to lowest application score. Despite the ranking, the review team members may still recommend against an award with cause, such as failure to meet one or more Minimum Eligibility Criteria, or for one or more other reason(s), such as, but not limited to, general MEA or State of Maryland funding restrictions.

Step 3: The Evaluation Team will convene either in-person or virtually to discuss individual review findings. Recommendation for or against an award

will be discussed by all team members, at which time Review Team members may make adjustments to their individual scores. A majority vote of the team members will be required to disqualify an application for cause. Any disqualification for cause will be documented in the award recommendation memo to the Director (MEA). The review team will recommend applications for funding based on the amount of funding available. The review team may, at its sole discretion, recommend one or more additional projects (in order of score) for funding, subject to additional funding availability. The Program Manager will make award and non-award recommendations to the Director that incorporates input from the Evaluation Team. Any dissenting concerns from one or more team member(s) will be included in these recommendations.

Partial awards: Partial awards may be awarded under the Program. A full grant award will be made for each approved project, based on application score, from highest to lowest. If sufficient funds are not available to fully fund a project, the applicant will be given an option to accept partial funding, based on funding availability. If the applicant agrees to the partial funding amount, then the project will be funded with the available funds. If the applicant does not accept partial funding for the project, MEA will offer the remaining funding to approved, but unfunded, applicants in order of application score (highest to lowest). MEA will follow this process until all funding has been expended or all remaining projects have rejected the offer. All requirements to fulfill a grant obligation will remain unchanged regardless of funding amount to the award and acceptance by an applicant after MEA has made the offer.

Required Application Documents: To be considered **complete**, an application for an AOI 3 grant award must include the following documents. Failure to submit any of the required documents may result in rejection of the entire proposal. (See proposal content for further information)

1. A Completed application Workbook (Excel)
2. Cover Letter: Must be on Applicant letterhead signed by an authorized representative with signatory authority, who will sign the Grant Agreement with MEA, if the Applicant organization is selected for an award. The cover letter must include:
 - a. Full name of the Applicant organization exactly as it appears on its IRS Form W9;
 - b. Names and street address(es) of the Resiliency Hub;
 - c. Names and street address(es) of microgrid component location(s) (if not physically on the Resiliency Hub);
 - d. Brief description of the Resiliency Hub, solar and energy storage components (as well as emergency generation if installed)
 - e. Description of loads to be served beyond those required by this FOA

- for a Resiliency Hub (such as microwave, refrigerator for food, etc.)
- f. Name of and contact information of the Project Contact; and
 - g. Name(s) of legal counsel with contact information.
3. Resiliency hub sizing modeling computation (or model printout). Solar Resilient, or other modeling software is acceptable.
 4. Application Narrative which discusses site selection, building location, city/county acceptance, sizing information/technical specifications, grant funding request, discussion of system design, timeline, total cost estimate, and hours of operation.
 5. Letter of intent/support from financial sponsor,
 6. Letter of interest from the Site owner,
 7. Letter of interest from the Site operator,
 8. Estimate of solar system annual output (PVWatts, Helioscope, PVSYST, etc.),
 9. Statement of acceptance to the terms of the FOA,
 10. Copy of the Maryland State Department of Assessments and Taxation (SDAT) Certificate of Good Standing for the site owner, the solar system installer (if identified), and the system owner (if different than the site owner),
 11. IRS Form W9 for the organization to receive grant funding (if awarded by MEA). **Note that if a state or local government entity is the site owner, site operator or system owner, MEA will only provide grant funding directly to that government entity.**
 12. Evidence of the Site Owner's control of the project site, for at least 25 years post-project completion in the form of a recorded deed (or other appropriate documentation accepted by MEA).
 13. A basic electrical schematic of the facility's electrical system (a one-line diagram is acceptable) and where/how the solar array and battery connects to it.
 14. For a purchased system, a calculation of the simple payback period (show your work). For a third party-owned system, provide the expected cost savings to the site owner over a 25- year period (show your work).

****Note: The following applies to an application for a project where a State Agency or Local Government entity is serving as the system owner:** Provide evidence of the state agency or local government entity's commitment to the project in the form of a signed contract with an installer, OR a letter of commitment signed by an authorized representative (e.g., a senior level official). When a letter of commitment is provided, include an overview of the state agency or local government's procurement process (summarize steps, required approvals, and an approximate timeline for each step of the process). Also, at a minimum, include the location and estimated capacity of the solar system being contemplated in the commitment letter. If a Power Purchase Agreement is being considered by the State or Local Government entity that must still go through a procurement process, the

government entity must state that their electricity price expectations should be available on the open market (and provide their basis for this expectation).

Grant Program General Provisions: MEA grant programs are covered by general requirements that will be made part of the grant agreement between MEA and a grantee. A copy of the General Provisions document is available on MEA's website at [[Grant Agreement General Provisions Attachment A](#)]; these General Provisions will be incorporated into each grant agreement issued by MEA.

- **MEA may, at its sole discretion, obligate some, all, or none of the FY23 Resilient Maryland Grant Program budget based on the quality and eligibility of applications submitted to MEA.**

Program-specific Requirements:

Definitions: For the purpose of this program:

- **Resiliency Hub:** A facility where a Solar Plus Energy Storage System is designed to provide electricity to meet important community needs during an extended electric grid outage. A Resiliency Hub is required to include emergency heating and cooling; refrigeration of temperature sensitive medications; plug power for charging of cell phone and computer batteries; ventilation and emergency lighting. A Resiliency Hub may also be identified as a designated location (by the city, county, or state) for the distribution of emergency services during extended grid outages. A Resiliency Hub is NOT a replacement for an emergency shelter because it is not required to be designed to survive extreme weather. It is also not required to have food service capabilities, nor is it required to have showers and locker rooms, but it must have restrooms with sinks. A Resiliency Hub must meet basic requirements necessary for occupancy, including health and sanitation. A Resiliency Hub is required to remain open at least 14 hours per day whenever the grid is down.
- **Walking distance:** A distance within one-half (½) mile along a public conveyance or along a well-established path (i.e., not a straight line) from the resident's residence to the resiliency hub. Shorter distances may be proposed when appropriate. A geographic barrier (rivers, freeways, etc.) should be considered a limiting barrier, as appropriate. This is not an absolute distance limit and may be modified, at MEA's discretion, when provided with appropriate justification.
- **Maryland Community Solar Pilot Program ("Community Solar"):** A virtual net energy metering pilot program authorized by Maryland statute (see Public Utilities Article, §§2-113, 2-121, 7-306, 7-306.1, and 7-306.2 Annotated Code of Maryland) and implemented by the Maryland Public Service Commission and its regulations (COMAR 20.62.01.01 et seq.).
- **Low Income:** A household whose annual adjusted gross income is at or below 175% of the federal poverty level.

- **Moderate Income:** A household whose annual adjusted gross income is at or below 80% of the local median income (as determined by the latest Maryland Department of Housing and Community Development (DHCD) “Income Limits” document).
- **Extended Grid Outage:** A planned or unplanned grid outage lasting more than four (4) hours.
- **Solar Plus Energy Storage System:** A system consisting of a solar PV array and an energy storage system where the solar system can charge the energy storage system while it is being used when the Resiliency Hub is islanded from the electrical grid.

Application Content: Applicants must submit a cover letter¹, the application spreadsheet, and a detailed proposal that includes the following information (in addition to other required documents listed above):

- 1) **Site justification:** Provide the method used to identify the community population to be served (that are located within walking distance). Identify base documents used. Describe the physical limits of the neighborhood expected to be served and an informed estimate of the LMI population to be served, further separated into moderate income and low income. Use maps and tables, as needed.
- 2) **Building Location:** Identify the specific building to be used as the Resiliency Hub. Explain the rationale for its selection. Provide documentation that the project site owner is interested in hosting a solar plus energy storage system for daily use and is willing to open the building as a Resiliency Hub when the grid is down. The commitment to serve as a Resiliency Hub must be for a period of at least five (5) years after the completion and successful commissioning of the Resiliency Hub. Documentation of project site owner interest may be in the form of a contract, a letter of intent, a letter of interest, etc.
- 3) **City/County Acceptance:** Provide documentation showing that the appropriate local officials (including their office of emergency planning) of the city/county where the system will be located have been notified of the proposed location of the Resiliency Hub. If possible, provide documentation that the applicant(s) (or system developer) has opened communications and that the concept of a Resiliency Hub is not immediately rejected. Please note that, while final approval is not required at the time of application, MEA will not provide a grant to a project if the relevant county/city has determined the site to be unacceptable or has communicated that it will not approve a necessary permit or other local requirement.
- 4) **System sizing information:** Provide a list of the proposed loads to be served by the Solar Plus Energy Storage System during grid outage, to include kW and estimated kWh/day. Describe the process used to size the solar system and the energy storage system. Provide a listing of the loads and time of day for each of their use. Provide the size of the solar system (kW) and the energy storage system (kW and kWh).² If a fossil fuel generator is included in the system design, provide its maximum power output, its fuel supply (including estimated time of operation available at various power levels), and proposed mode/strategy of operation. Verify and document that sufficient roof/ground space is

¹ An authorized representative of the building owner and the project development organization must sign the cover letter.

² Preliminary designs indicate a ratio of 3 kWh of energy storage per 1 kW of solar PV would provide 50% probability of meeting the 3-day requirement. Proposals must show the actual modeling used to achieve the system sizing.

available to accommodate both the solar system and energy storage system. Indicate what modeling tool was used and provide key system printouts that show loads, system and storage sizing. Tools such as SolarResilient³, REopt or REopt Lite⁴, and System Advisor Model (SAM)⁵ should be considered. Other established modeling tools may also be used but must be specified.

- 5) Provide grant request amount as follows: Multiply the required solar system size by \$3,000/kW. The maximum grant amount is \$500,000.
- 6) System design: Provide a one-line diagram of the system showing major equipment, panels, breakers, etc. If a backup or emergency fossil fueled generator will be included, explain how it will be hooked into the system, to include a one-line diagram showing energy flow during generator operation. Show what equipment and wiring is new and what is existing.
- 7) Timeline: Provide information showing estimated dates for the project's start, completion, commissioning, interconnection, and Permission to Operate (PTO).
- 8) Total Cost: Provide estimated total project cost, as well as the cost for the minimum necessary equipment (solar modules, inverters, energy storage device, charge controller, system controller).
- 9) Provide a statement that the applicant(s) has (have) reviewed this FOA and agree(s) to follow its requirements.
- 10) Ongoing operation: Provide a plan for the operation of the Resiliency Hub during an extended grid outage. Identify who (which organization) will be responsible for managing access to the Resiliency Hub during a grid outage, and what the expected costs will be. Provide a plan for the operations and maintenance of the system, including the name of the responsible party and the minimum schedule of inspection and preventive maintenance.
- 11) Operating Hours: Discuss the hours of operation for the hub during an extended grid outage. The Resiliency Hub must be open a minimum of 14 hours per day. These hours may be continuous or non-continuous. Explain the rationale for the hours proposed. Longer hours receive more points than the minimum of 14 hours per day (see Annex 1: FY23 Resilient Maryland Resiliency Hub Application Checklist for further information). Hours of operation may shift based on feedback from users and the needs of the community.

Restrictions and Limitations:

- When a city, county or state government entity is a grantee (the site owner, site operator or system owner), the government entity will be required to attest to its compliance with Sections 14-416 and 17-303 of the State Finance and Procurement Article (as applicable) **and** MEA will only provide grant funds directly to the government entity and not to any other grantee.
- At least one person certified as PV Installation Professional (PVIP) by the [North American Board of Certified Energy Practitioners \('NABCEP'\)](#) must be involved in the design and/or

³ <https://solarresilient.org>

⁴ <https://reopt.nrel.gov/tool>

⁵ <https://sam.nrel.gov>

installation of the community solar array. Each applicant will be required to provide the name and certification number of this individual(s).

- The grantee receiving funding will be responsible for submitting all reporting documents, including invoices, to MEA.
- Only one MEA grant may be awarded per project⁶.
- Each project will be given up to 2 years to be completed. When necessary, an extension may be requested from MEA but must be made at least two months prior to the expiration of the existing grant.
- The property owner of the building where the project will be located must agree to maintain the building as a Resiliency Hub for at least 5 years.
- The grant is available, regardless of the ownership structure, provided the site owner, the building owner and the system owner all agree to the project, which must include the installation of the Resiliency Hub at that particular site.
- Energy generated and used at the Resiliency Hub during a grid outage shall be provided at no cost to those in the community using the hub, although the Resiliency Hub operator may impose reasonable limits on energy use to ensure the system lasts the required period.
- A project with a solar array supplying power as part of the Maryland Community Solar Pilot Program must be individually coordinated with MEA, who will consider the project as a whole.
- No grant funding may be used to support the installation of a fossil fueled generator (with the exception of installing a single breaker in the applicable switchboard).
- The Solar Plus Energy Storage System may be used to provide solar energy to the facility, as well as peak shaving to reduce demand charges. Attempts to use the system for other purposes (such as frequency regulation) are not precluded by this grant if the system is operating under an authorized utility tariff. Regardless of the routine system use, the system operator shall ensure that the battery reaches and maintains at least a 90% charge prior to any known storm or weather condition that might be expected to cause a power outage (hurricane, ice storm, derechos, etc.). Normal operation may resume after the threat to the grid has passed.
- The grantee(s) is responsible for identifying and purchasing heating, cooling, refrigeration, lighting, and plug load charging equipment. This equipment must be installed and/or available on-site when the solar plus energy storage system is completed. A refrigerator of adequate size to meet the calculated need is required to be available and operating on-site. Resiliency Hub grant funding may NOT be used to pay for this equipment or its installation.
- A Maryland Historical Trust review must be completed without an adverse finding before grant funding may be paid.
- The solar system must meet minimum system requirements as specified in IEEE 1547 and the National Electric Code.

⁶ MEA encourages grantees to consider energy efficiency in combination with a PV project. A grantee may also apply for, and receive, an MEA Commercial, Industrial and Agricultural (CI&A) grant for energy efficiency or a Lawton Loan. Developers may use multiple energy efficiency or renewable energy grants from other State or Federal agencies to fund this project.

- An energy storage system must be installed in compliance with all local building, fire, and electrical codes.
- For each solar and energy storage system, all components must be listed or labeled by a recognized national testing laboratory.

Labor Requirements

Grantees shall be required to provide a written attestation that all installation contractors and subcontractors working on the project:

- 1) Pay at least 150% of the State minimum wage;
- 2) Afford employees the right to bargain collectively for wages and benefits;
- 3) Provide paid leave;
- 4) Are considered “Covered Employment” for purposes of unemployment insurance benefits in accordance with Title 8 of the Labor and Employment Article;
- 5) Entitle the employees to Workers’ Compensation benefits in accordance with Title 9 of the Labor and Employment Article;
- 6) Have been in compliance with federal and state wage and hour laws for the longer of the immediately preceding 3 years or for the duration of the contractor’s or subcontractor’s business operation; and
- 7) Offer employer-provided health insurance benefits with monthly premiums that do not exceed 8.5% of the employee’s net monthly earnings.

Grant Funding and Payment:

- Upon receipt of grant agreement signed by both the grantee and MEA, MEA will encumber reserve) funding for the proposed project specified in the grant agreement.
- Resilient Maryland funds cannot be used to offset costs that were incurred prior to the execution of a commitment letter or grant agreement, at MEA’s sole discretion.
- Up to 55% of the total grant funding may be invoiced at the time of ordering all required solar and battery materials. Remaining funds may be invoiced after the Solar Plus Energy Storage System is completed, commissioned, received permission to operate, and placed into service.
- The grantee will inform MEA when the project is placed into service (all zoning requirements met, all permit inspections passed and permits closed, all commissioning tests satisfactorily completed, and permission to operate received from the utility). MEA will then perform a site visit (or may waive the site visit at its discretion). Upon completion of the site visit, the grantee will submit a Final Invoice and Completion Report. Upon receipt of a complete and accurate Final Invoice and Completion Report, MEA will approve the grant for payment.
- For any project that is inspected by MEA, all major deficiencies, as specified by MEA, must be corrected before MEA will pay any grant funds. Minor deficiencies should be addressed/corrected, but payment of grant funds will typically not be delayed.

Reports: MEA will require each recipient of a grant award to complete and submit quarterly progress reports, for the period of time commencing with execution of the grant

agreement between the grantee and MEA and ending with MEA's receipt of the Final Invoice and Completion Report. Each progress report should be submitted by email no later than the 10th day of the months of January, April, July, and October. Each grantee may format their progress reports as desired, but each report must include, at minimum: design and construction progress, as well as any problems that would impede completion of the project.

Within the first three years of operation, an additional report will be required describing the actual usage of the Solar Plus Energy Storage System both during grid operation and throughout each grid outage. "Lessons learned" and program recommendations are appropriate for this report.

Solar Renewable Energy Credits (SRECs): Projects must register for and receive Solar Renewable Energy Credits (SRECs). Each grantee will be required to verify the successful registration of projects with the Maryland Public Service Commission and with PJM Interconnection. For information concerning SREC registration, consult the PJM EIS website at <https://www.pjm-eis.com/>.


Program Changes: Any update (e.g., extension of a deadline) or clarification about the Program and any corrections to inadvertent errors in the Program information will be available on the Public Facility Solar Grant Program webpage. In addition, MEA will communicate clarifications and updates made after the application deadline directly to applicants or grantees, as applicable, by letter and/or e-mail.

The final grant amount for each Grantee will be made after review of all proposals received and is subject to funding availability for the Program and any relevant statutory requirement applicable at that time

Submission Instructions: Once complete, Application packages should be submitted to MEA electronically via email to RMP.MEA@Maryland.gov. **All documents must be submitted no later than 5:00 P.M. EST, January 26, 2023.** MEA **will not accept** any application packages after this deadline under any circumstances, and all documents received by the deadline will constitute the entire submission. If electronic submission is not possible, an Applicant should contact MEA via email at RMP.MEA@Maryland.gov or by calling Program Manager Brandon Bowser at 443.306.0304 **no fewer than fourteen (14) days** prior to the January 26, 2023 deadline to arrange an alternative method of submission.

Questions can be directed to David Comis, Senior Solar Program Manager, via email at David.Comis@Maryland.gov or via phone at 443.908.1743.

Annex 1: Resiliency Hub Checklist

 Maryland Energy Administration		FY23 Resiliency Hub Grant Program	
	APPLICATION	REVIEW CHECK LIST (INTERNAL)	
A. Site Justification			
	Does the application/proposal: <ul style="list-style-type: none"> • Provide the method used to identify the LMI population to be served (within walking distance)? • Identify the method or provide base documents used? • Describe the limits of the neighborhood expected to be served and an educated estimate of the LMI population to be served (moderate income, low income)? • Points = \$100,000/\$ median income of area being served 	Points =	
	<ul style="list-style-type: none"> • If the application does not identify the method, does it provide clear base documents to show a high density, Low-and-Moderate Income population within walking distance of the proposed site? • Points: Is the proposed Resiliency Hub on a property in an LMI community that is within walking distance (normally assumed to be ½ mile)? (1 point for yes). 	Yes/No: NOTE: Points =	
B. System Location			
	Does the application/proposal: <ul style="list-style-type: none"> • Identify the building to be used as a Resiliency Hub? Use a map as appropriate. • Explain the rationale for its selection? • Provide documentation that the building owner is interested in a solar plus storage system for daily use and is willing to open the building as a Resiliency Hub when the grid is down? Documentation may be a contract, a letter of intent, a letter of interest, etc. <ul style="list-style-type: none"> • If appropriate, is a map provided to show the location of the building? 	Yes/No: NOTE:	
	Does the project bring new backup power where there was no backup power before? One point if yes	Points =	
C. City/County Acceptance			
	Does the application/proposal: <ul style="list-style-type: none"> • Provide documentation that the city/county (including their office of emergency planning) has been notified of the proposed location of the Resiliency Hub? If the 	Yes/No: NOTE:	

	<p>city/county has been involved in site selection, does the proposal provide a brief paragraph to this effect.</p> <ul style="list-style-type: none"> • Provide documentation that the city/county is open to the concept of a Resiliency Hub, and that they do not reject the location out of hand? (Final approval is not required with the application but MEA will not fund a proposal rejected by the city/county). 	
D. System Sizing Information		
	<p>Does the application/proposal:</p> <ul style="list-style-type: none"> • Provide a listing/table of the proposed loads to be provided during grid outage, to include kW, time, and duration per day, and estimated kWh/day? • Describe the process used to size the solar system and the energy storage system? • Provide the size of the solar system (kW) and the energy storage system (kW and kWh)? • If a fossil fuel generator is included in the system design, does the application provide its maximum power output? its fuel supply (including estimated time of operation available at various power levels), and proposed mode/strategy of operation? • Verify and document that sufficient roof/ground space is available for the solar system and energy storage system? • Indicate what modeling tool was used and provide key system printouts that show loads, system and storage sizing? Tools such as SolarResilient, REopt or REopt Lite, and System Advisor Model (SAM) should be considered. Other established modeling tools may also be used but must be specified. 	<p>Yes/No: NOTE:</p>
E. Grant Amount Requested		
	<p>Does the Application/Proposal</p> <ul style="list-style-type: none"> • Provide the grant amount requested? 	<p>Yes/No: NOTE:</p>
F. System Design		
	<p>Does the application/proposal:</p> <ul style="list-style-type: none"> • Provide a one-line design of the system showing major equipment, panels, breakers, etc.? • If a backup or emergency fossil fueled generator will be included, does the application explain how it will be hooked into the system, to include a one-line diagram showing energy flow during generator operation? 	<p>Yes/No: NOTE:</p>

G. Review Notice of Grant Availability		
	<ul style="list-style-type: none"> Does the application/proposal provide a statement that the applicant has reviewed the Funding Opportunity Announcement and agrees to follow its requirements? 	Yes/No: NOTE:
H. Timeline (Tentative at time of submittal)		
	<p>Does the application/proposal: Provide information showing estimated project start, completion, commissioning, Interconnection and Permission to Operate?</p> <p>One point if project is expected to be completed in less than 18 months</p>	Points =
I. Total Cost		
	<p>Does the application/proposal? Provide estimated total project cost? Provide estimated cost of the minimum necessary equipment (solar modules, inverters, energy storage device, charge controller, system controller)?</p>	Yes/No: NOTE:
J. Ongoing Operation (Tentative at time of submittal)		
	<p>Does the application/proposal:</p> <ul style="list-style-type: none"> Provide a plan for the operation of the Resiliency Hub during an extended grid outage? Address who will provide site manning and expected costs? <p>Address who will provide maintenance and testing of the hub?</p> <p>One point if a reasonable plan is provided.</p>	Yes/No: NOTE: Points =
	Total Points Added	